

ABSTRACT OF THE DISCLOSURE

A flip chip bonding method including steps of applying a pressure and a heat and applying an ultrasonic wave in a plurality of directions or along a circular
5 locus for connecting solder bumps, which are formed on one or both of a connecting pad of a semiconductor element or a connecting pad of a wiring board, whereby flip chip bonding is performed without using flux, a drop of yield and deterioration of reliability are improved.